

Thursday, 2/14/2008 10:57:02 AM  
W Johnston

## Process Sheet

Number : CU-DAR001 Dart Helicopters Services Drawing Name : CUFF  
 Estimate Number : 37426  
 P.O. Number :  
 This Issue : 2/14/2008 S.O. No. :  
 Prsht Rev. : NC Part Number : D36591  
 First Issue : / / Type : MACHINED PARTS Drawing Number : D3659 UNDER REV  
 Previous Run : 36650 Drawing Revision : LHR  
 Material :  
 Written By : Due Date : 2/25/2008 Qty: Um: Each  
 Checked & Approved By : 08.03.06  
 Comment : est rev A new issue 07.09.19 EC verified by:JLM  
 SEE W/B LTRG  
 20

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6009129 Crosstube Material



Comment: Qty.: 0.6303 Each(s)/Unit Total: 3.7819 Each(s)

D6009-129 X-TUBE MATERIAL

batch: ~~35669~~ 32306

\*\*\*\*Use off-cut from D212-664-107 X-TUBE\*\*\*\*

20 08/03/08

2.0 BAND SAW BAND SAW



Comment: BAND SAW

Cut blank 7.300" long

3.0 DOOSAN LATHE DOOSAN LATHE



Comment: DOOSAN LATHE

1-Turn as per folio FA 707 & DWG D3659,

FOLIO REV: A

DWG REV: mel

2-Deburr as required

20 08/03/09

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE


5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

08.03.09

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08.03.06	3	DRAW $\phi 0.128$ , $\phi 0.306$ , & C'SINKS PER DZIZ-664-147 Rev A REF. D3659 Rev B Preliminary Issue (REF)				 08.03.06 251642	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: 15 Date: 08/03/10  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/14/2008 10:57:02 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CUFF

Job Number: 37426

Part Number: D36591

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

2T 08-03-10 (20)

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BK 08-03-10 (20)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 55479

AS 08/03/11 (20)

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/03/12 (20)

Job Completion



mi 2008/3/12 (20)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**SECTION A-A**

R0.032  
(TYP INSIDE EDGES)

CHAMFER 0.100 x 45°  
(TYP OUTSIDE EDGES)

**D3659-1 CUFF**

**NOTES:**

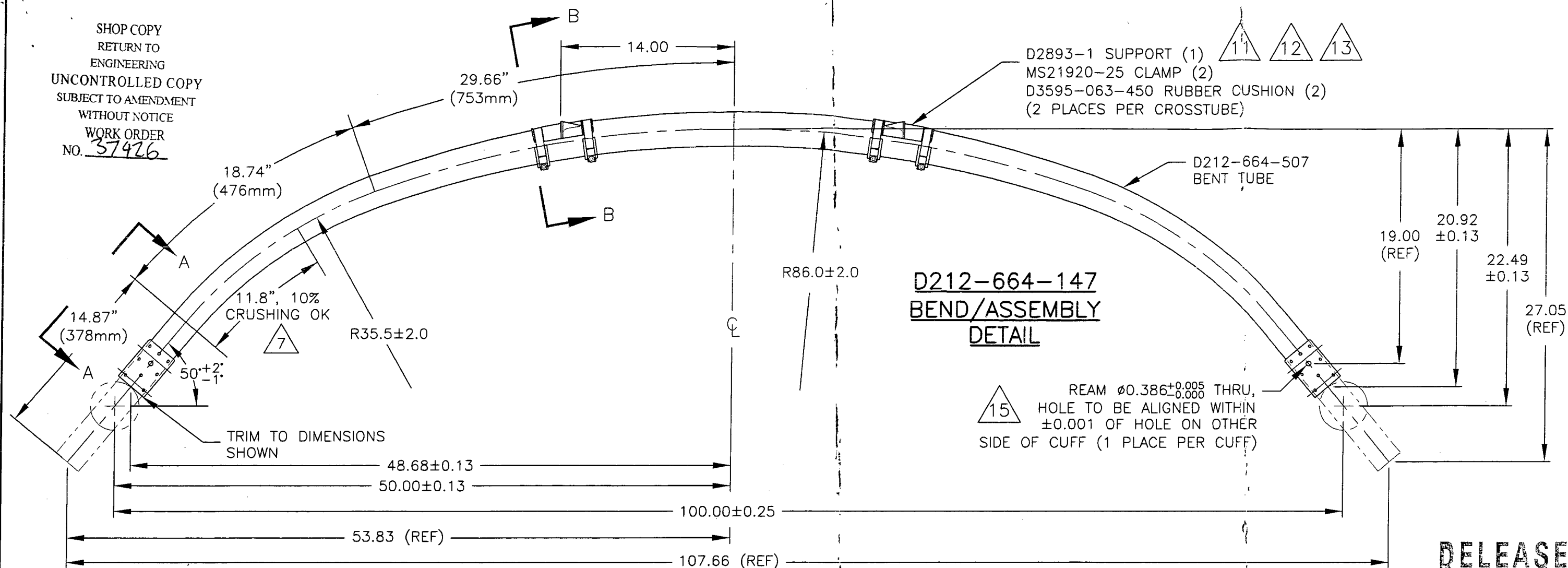
- 1) MATERIAL: 7075-T6/T6511 SEAMLESS TUBE (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11)  
(CAN MAKE FROM D6005, D6006, D6008, D6009, D6011, OR D6019)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.58 lbs

NO. 34426  
W/ORDER  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
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ENGINEERING  
RETURN TO  
SHOP COPY

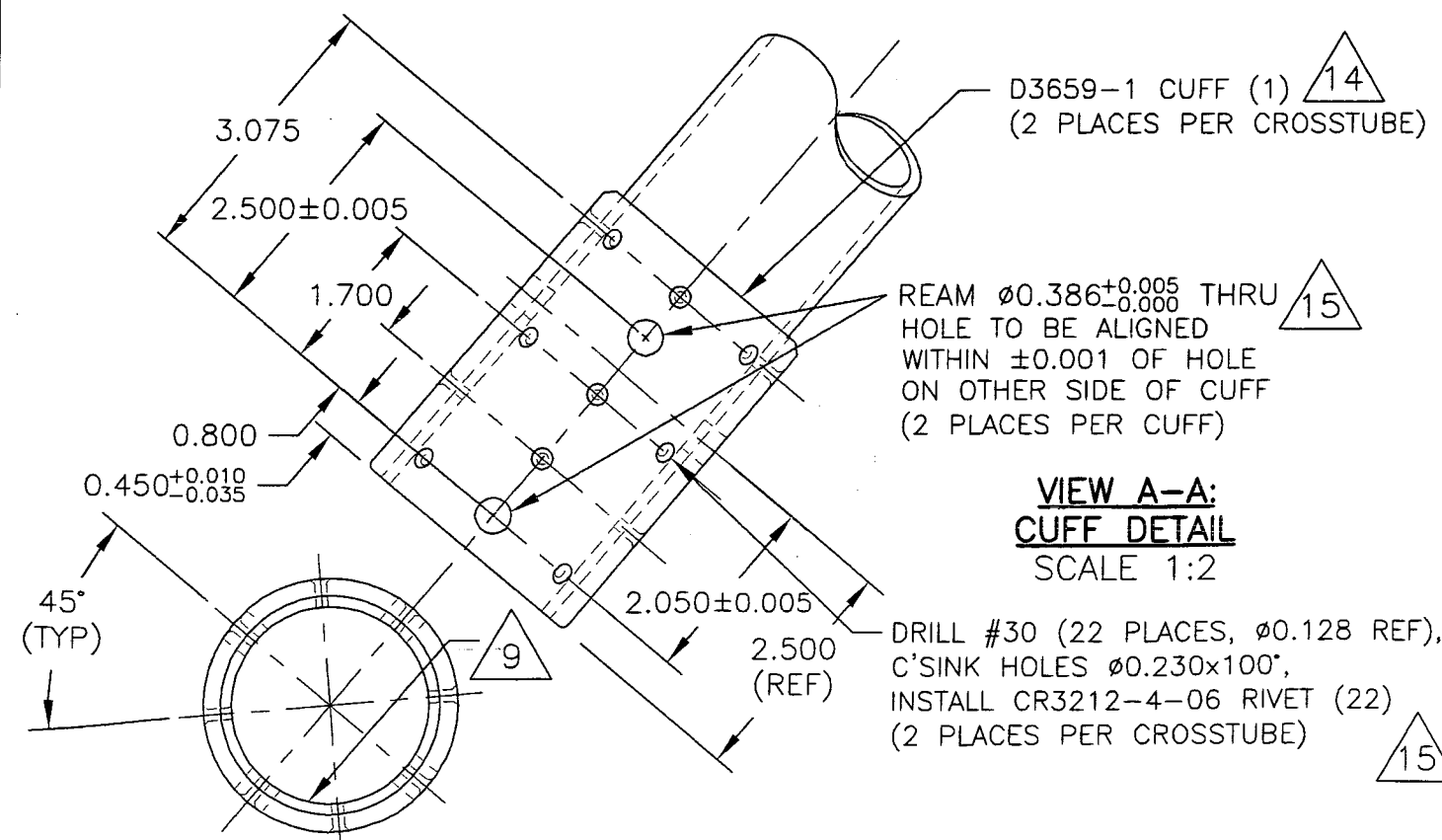
**RELEASED**  
07.04.24

A		New Issue		CP	07.07.07
REV.		DESCRIPTION		BY	DATE
DESIGN	<i>JP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA			
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CHECKED	<i>JP</i>	DRAWING NO.			REV. A
MFG. APPR.	<i>JP</i>	D3659			SHEET 1 OF 1
APPROVED	<i>JP</i>	TITLE			SCALE
DE APPR.	<i>JP</i>	CUFF			1:
DATE	07.07.07	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

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WORK ORDER  
NO. 37426

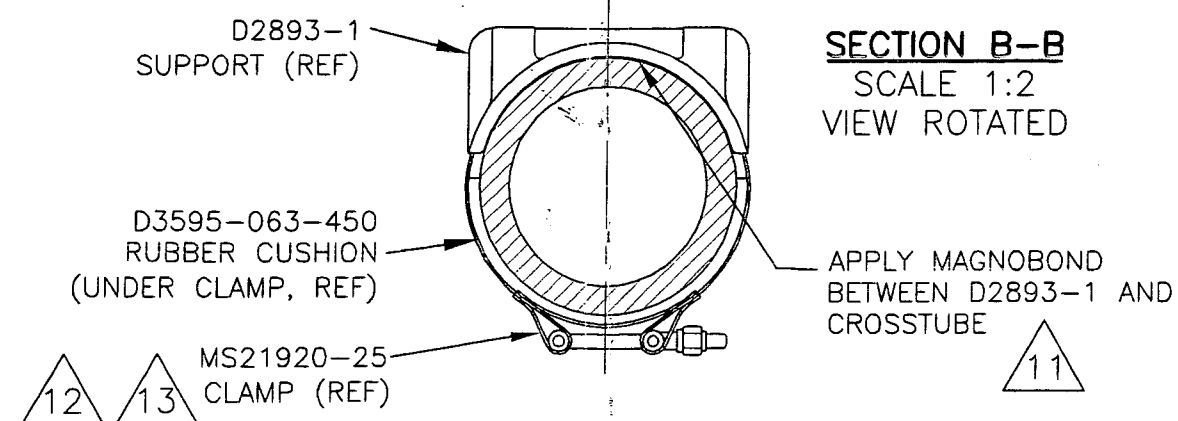


RELEASED  
07.09.24



### D212-664-147 BEND/ASSEMBLY DETAIL

REAM Ø0.386±0.005 THRU,  
HOLE TO BE ALIGNED WITHIN  
±0.001 OF HOLE ON OTHER  
SIDE OF CUFF (1 PLACE PER CUFF)

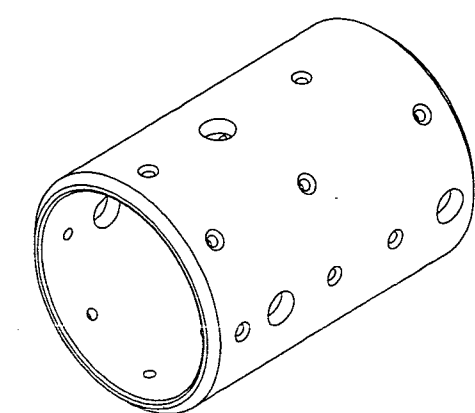


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		DATE		DRAWING NO.	REV. A
		07.07.07		D212-664-147	SHEET 2 OF 3
				TITLE	SCALE
				CROSSTUBE (205/212/412 LOW FWD)	1:8

D  
C  
B  
A

D  
C  
B  
A

2.050±0.005



ISOMETRIC DETAIL  
NOT TO SCALE

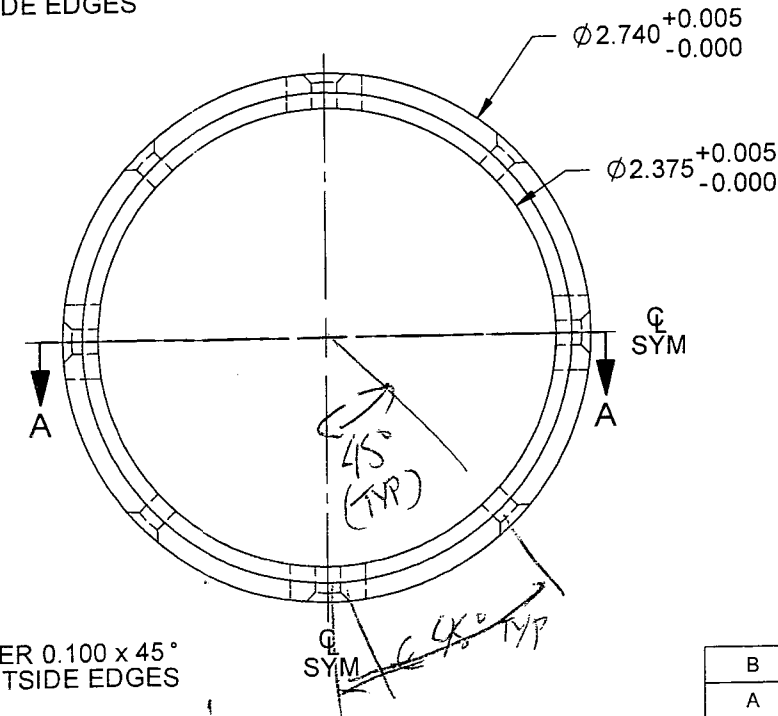
PRELIMINARY ISSUE

GP 08.03.06

REFERENCE ONLY

SECTION A-A

R0.032 TYP  
INSIDE EDGES



CHAMFER 0.100 x 45°  
TYP OUTSIDE EDGES

D3659-1 CUFF

DRILL #30 (Ø0.128 REF)  
C'SINK Ø0.230x100°  
TYP 22 PLACES

REAM Ø0.386 +0.005/-0.000  
HOLE TO BE ALIGNED  
WITHIN ±0.001 OF HOLE  
ON OTHER SIDE OF CUFF,  
TYP 6 PLACES

- NOTES:
- 1) MATERIAL: 7075-T6/T6511 SEAM LESS TUBE (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11)  
(CAN MAKE FROM D6005, D6006, D6008, D6009, D6011, OR D6019)
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.58 lbs

B	ADD Ø0.128 & Ø0.386 HOLES	CP	08.03.03
A	NEW ISSUE	CP	07.07.07
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3659	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		CUFF	NTS
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Dart Aerospace Ltd

WORK ORDER CHANGES							
W/O:		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
DATE	STEP						

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

WORK ORDER NON-CONFORMANCE (NCR)								
NCR:		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
DATE	STEP		Initial Chief Eng	Action Description Chief Eng	Sign & Date			
0803-10	2.0	7x PARTS MADE @ old Tolerance of .450 <sup>+0.010</sup> <sub>-0.035</sub> , New Prod Dwg at .450 <sup>+0.00</sup> <sub>-0.00</sub> PB Dim 0.432		PARTS Acceptable. @ .450 <sup>+0.010</sup> <sub>-0.035</sub> .	RP 08/03/10		GP 08.03.10 P 081042	

NOTE: Date & initial all entries